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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,624	07/13/2001	Brian R. Haug	42390P12060	3735

8791 7590 11/30/2004

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EXAMINER

AST, FATIMA M

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/905,624	HAUG ET AL.	
	Examiner	Art Unit	
	Fatima Ast	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it does not include that which is new in the art to which the applicant's invention pertains. The abstract is further objected to because it is not within the recommended range of 50 to 150 words and it uses phraseology that can be implied, "The present disclosure relates to..." Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claims 16-27 and 30-36 are objected to because of the following informalities:

5. Regarding claim 16, line 2 contains the phrase "to the to the" which is grammatically incorrect.

6. Regarding claim 30, line 2 contains the phrase, "as to, during operation, to" which is grammatically incorrect.

7. All remaining claims not specifically addressed are objected to by virtue of their dependencies.

8. Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. The term "substantially" in claims 1, 3, 7, 10, 28, 33, 38, 40, 44 and 47 is a relative term which renders the claim indefinite. The term "substantially" is not defined

Art Unit: 2143

by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Moreover, Examiner requires Applicant to specifically point out the definition of "substantially" within the specification and enumerate its use as it pertains to the claimed subject matter and to explain the difference between "substantially fully qualified" and "fully qualified". However, due to lack of clarity, for purposes of prior art examination, Examiner will disregard the term "substantially" wherever it appears in these claims and any subsequent claims which are dependent upon these claims.

12. The term "at least some" in claims 16 and 19 is a relative term which renders the claim indefinite. The term "at least some" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Examiner suggests using the term "at least one." For purposes of prior art examination, Examiner will substitute the term "at least one" for "at least some" wherever it appears in these claims and any subsequent claims which are dependent upon these claims.

13. Claim 40 recites the limitation "wherein utilizing at least in part a host name" in line 1. There is insufficient antecedent basis for this limitation in the claim. For purposes of prior art examination, Examiner will disregard the words "at least in part".

14. All remaining claims not specifically addressed are rejected by virtue of their dependencies.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 1-13, 16-21 and 28-50 are rejected under 35 U.S.C. 102(b) as being anticipated by UPnP™ Device Architecture (Version 1.0, 08 June 2000).

17. Regarding claims 1, 16, 28, 37 and 38, UPnP™ Device Architecture (UPnP) discloses a method, an apparatus and a machine accessible medium including thereon instructions which, when executed by a machine cause the machine to perform a method comprising: determining a domain name of a device; and deriving a fully qualified server name (per pending claim 37) utilizing the domain name (per pending claims 1, 28 and 38) (§ Introduction, § 0.0-0.7). Wherein said method comprises reaching an agreement between two or more parties as to the host names for a type of servers which provide network resources and creating a device which, when established on the same network domain as servers which conform to the agreed upon host names, may dynamically configure the device to facilitate connection to the servers on the network domain (per pending claim 16).

18. Examiner notes that UPnP discloses two-way communications and dynamic assignment of network IP address/domain name (pg 1 2nd paragraph, pg 2, 4th paragraph, pg 4 5th paragraph) including the use of DNS and DHCP. Examiner notes

that pre-configured DNS servers (pg 5 6th paragraph) are pre-configured with information about devices including the host names of such devices.

19. Regarding claims 2 and 39, UPnP discloses utilizing a host name (§ Introduction, § 0.0-0.7). Examiner notes the use of DNS as noted above.

20. Regarding claims 3, 17, 33 and 40, UPnP discloses utilizing a predefined host name (§ Introduction, § 0.0-0.7). Examiner notes the use of DNS as noted above.

21. Regarding claim 18, UPnP discloses dynamically determining the domain name of the network (§ Introduction, § 0.0-0.7). Examiner notes that dynamic addressing disclosed in UPnP, using either DHCP or Auto-IP (pg 4 5th paragraph), necessitates knowledge of the domain name of the network in order to successfully assign an address to a device.

22. Regarding claims 4, 19, 32, 35 and 41, UPnP discloses generating the fully qualified server name by combining the domain name and the host name (§ Introduction, § 0.0-0.7). Examiner notes that UPnP discloses DNS. RFC 1034 teaches that the combining of host and domain names is inherent to DNS (§ 6.3).

23. Regarding claims 5, 6, 42 and 43, UPnP discloses utilizing a network address (per pending claims 5 and 42) comprising utilizing an Internet Protocol address (IP address) (per pending claims 6 and 43) (§ 0.Addressing 2nd paragraph).

24. Regarding claims 7 and 44, UPnP discloses utilizing a fully qualified client name (§ 0.0-0.7).

25. Regarding claims 8 and 45, UPnP discloses converting a network address of the device into the fully qualified client name (§ Introduction, § 0.0-0.7) with the use of DNS.

26. Regarding claims 9, 10, 46 and 47, UPnP discloses utilizing a name server (per pending claims 9 and 46) compliant with DNS (per pending claims 10 and 47) (§ Introduction, § 0.0-0.7).

27. Regarding claims 11 and 48, UPnP discloses removing a host name from a fully qualified client name. Examiner notes that UPnP discloses DNS and the removing of a host name from a fully qualified client name is inherent to DNS. RFC 1034 teaches this inherency wherein a DNS server may receive a query for a client name with a domain for which it is not authoritative. The DNS server inherently removes the host name so as to determine the domain name of the client name being queried, thereby allowing it to determine if the DNS server is authoritative for that domain (RFC 1034 § 6.2.6).

28. Regarding claims 12 and 49, UPnP discloses making a network connection to the fully qualified server name (§ 1.2.3, § 2.9).

29. Regarding claims 13, 29, 30 and 50, UPnP discloses choosing a network interface and determining the domain name associated with the network interface (§ Introduction, § 0.0-0.7).

30. Regarding claims 20, 31, 34 and 36 UPnP discloses a memory element to at least temporarily store the domain name of the network interface, host name and fully qualified server name (§ 0.0-0.7).

31. Regarding claim 21, UPnP discloses establishing within a first network domain a first set of servers which conform to the agreed upon host names (§ 0.0-0.7).

Claim Rejections - 35 USC § 103

32. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

33. Claims 14 and 51 rejected under 35 U.S.C. 103(a) as being unpatentable over UPnP, in view of "Objects, the Network, and Jini" (Venners, Bill, JavaWorld, June 1999).

34. Regarding claims 14 and 51, UPnP does not specifically enumerate choosing a single network interface from a group of network interfaces. However, Venners discloses a lookup method that allows a client on a network to query available services on a network and choose one service from multiple available services (pg 4). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine the lookup method of Venners with the choosing of a network interface of UPnP in order to enable smooth adding, removal and finding of devices and services on a network as disclosed by Venners (pg 1).

35. Claims 15, 22-27 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over UPnP.

36. Regarding claims 15 and 52, though UPnP does not specifically enumerate the reporting of an error when the determining of the domain name of a device cannot be accomplished, UPnP discloses the use of HTTP (§ Introduction) and error reporting is a component of HTTP (e.g. status code 404 "Not Found" is generated when the server cannot resolve the Request-URI). Thus it would have been obvious to have a specific

directed use for error reporting by HTTP upon concluding that a domain name of a device could not be determined.

37. Regarding claims 22-24, though UPnP does not specifically enumerate a second set of servers established within a second network domain and a device which may dynamically configure itself to facilitate connection with each of the first and second sets of servers, UPnP discloses device-to-device interoperability (§ Introduction, § 1.Discovery). Furthermore, UPnP discloses (as noted in claim 16 above) dynamically configuring to facilitate connection to multiple servers on a network domain wherever located. It would have been obvious to have a second set of servers established within a second network domain (per pending claim 22) and to create a device which may dynamically configure itself to facilitate connection to each of the first and second sets of servers (per pending claim 23) in order to take advantage of the easy and robust connectivity among stand-alone devices and PCs from many different vendors, as disclosed by UPnP (§ Introduction). Further, Examiner finds that it would have been obvious for multiple sets of servers to comprise multiple subsets of multiple servers which provide network resources (per pending claim 24) wherein the multiple servers comply with UPnP.

38. Regarding claim 25, though UPnP does not specifically enumerate the assignment of additional, alternative host names to the first set of servers, UPnP discloses DNS. DNS provides for the assignment of multiple hostnames and it would have been obvious to utilize this functionality and assign additional, alternative host

names to the first set of servers in order to take advantage of ease of use as disclosed by UPnP (§0.5).

39. Regarding claims 26 and 27, though UPnP does not specifically enumerate one of the two or more parties creates the device or instructs a third party to create the device, and another of the two or more parties establishes servers on a network or instructs a fourth party to establish servers on a network, UPnP discloses multiple-vendor interoperation and device-to-device interoperability (§ Introduction). UPnP further discloses the interoperability of devices and control points using different versions of UPnP networking. It would have been obvious for one party to create the device and a second party to establish servers on a network (per pending claim 26) and further obvious for one party to instruct a third party to create the device and a second party to instruct a fourth party to establish servers on a network (per pending claim 27) in order to achieve the advantages of interoperability as disclosed by UPnP.

Conclusion

40. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

With regard to host names:

Mockapetris, P., "RFC 1035 – Domain names – implementation and specifications", November 1987

With regard to generation of errors:

Fielding, R. et al, "RFC 2616 – Hypertext Transfer Protocol – HTTP/1.1" June 1999

With regard to dynamic network configuration:

US-6,601,093 to Peters, Marcia L

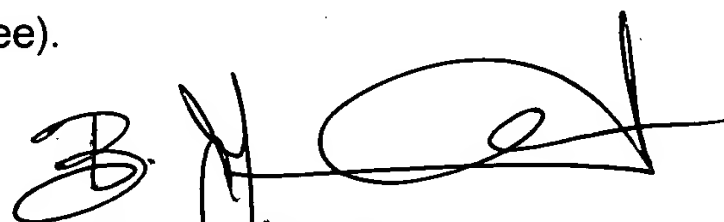
US-5,991,828 to Horie et al.

US-5,557,748 to Norris, David

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fatima Ast whose telephone number is (571) 272-7217. The examiner can normally be reached on M-F, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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